

The Free Flighter
Journal of the NSWFFS Inc
June 2020
Special Edition



The house without a
Tennis Court

Editorial May 2020

Hi Team, I certainly hope isolation restrictions are not impairing your sense of humour or your ability to keep yourself occupied. I still have plenty of balsa, but glue is a little short. I am sure a quick phone call to Kelletts will fix that. No meeting again for May, restrictions have not been eased enough to have group meetings. It also means that the field is not quite open for large gatherings as well. I have heard that some members have used the field, but social distancing has been observed and short distances travelled. In restricted terms it is called exercise.

Not a lot of news to spread but I am not aware that any of our members have contracted the dreadful virus. It appears that it does not affect the younger group as much as older people. New March nursing home is a terrifying example of the danger this virus presents.

On a happier note Roy has been selling 'stuff' donated to us on eBay and these sales have been steadily increasing our bank balance. We have recently written an article for FFDU and Wingspan asking for donations of gear which is no longer used or required by the owner which we can sell and raise money to improve the facilities at West Wyalong. In the last 2 months Roy has managed to list and sell on eBay about 130 items from different donors.

A recent acquisition has been the 54m bitumen control line circle at the West Wyalong field, but you are probably already aware of that. This was financed by CLAS \$25k, \$15k as a short-term loan ex MAAA taken out over 5 years, and the balance to by NSWFFS about \$14k. A request for a club grant to build a shed close to that circle has been submitted and we will await the results.

They should be published in July after the MAAA executive has made the decision on distribution of funds.

Adrian Bryant has recently offered us a plans cabinet complete with many Australian plans included. We are currently arranging to have this shipped to Sydney for subsequent transport to West Wyalong. Thanks Adrian.

A few years ago, Peter Braid cornered the market on P30 props. Roy recently contacted Peter and we have arranged to purchase these from him. That was always the arrangement, but time gets away sometimes. Peter has been busy working and will eventually return to the fold; also heard that John Braid is still well and with us. I will look forward to seeing both when the wind changes direction.

I hope that all members are safe and healthy.

President NSWFFS

Terry Bond

Special Early Newsletter

Just to **GET** the word around that we are back in business from the 1st July.

Editorial July 2020

Hi team, the Covid-19 brakes are slowly starting to come off and we are now again experiencing the fun and excitement of flying, trimming and crashing our home-made model aircraft. We will also have the opportunity to hold our general meetings again at the usual location. Perhaps enjoy a meal but you will receive an information email in due course.

The contest calendar also starts again from 1 July and the SCC, NSWFFS and Victorian state champs will be held from 9-15 July at West Wyalong. The program finishes on 14 July so the extra day is for delays or wet weather. The events schedule is contained later in this edition.

At the last MAAA council conference when the fees were set a discount of \$10 to the MAAA for early registration prior to 31 July was accepted. The NSWFFS fees are correspondingly reduced to \$110 to reflect these savings. It might only be ten bucks but it should help as an incentive to register early.

There was a working bee at WW over the June long weekend and sufficient workers offered their services to complete a big move. The big move was to dismantle the tennis court fence and reassemble it around the recently constructed asphalt flying circle as a safety fence. This required cutting the fence off below ground level and carrying sections from near the house to the circle area. Holes were dug with a motorized post hole digger then crow barred to the required depth, steel poles inserted into the holes and concreted in place. I can assure you that this was not an easy job; the swelling in my hands is slowly going down and the pain is receding. I have not mentioned the removal of the louvers from the eastern side of the house or the installation of new windows or the cleaning carried out.

Roy will include some photos of the work carried out and the tools of torture used to complete the work.

The workers who fronted were; Roy Summersby, Gary Goodwin, George Bishop, John Pennells, Peter and Gail Scott, Vin and Lee Morgan, Chris and Janna Bush, Michael Towell and Nicole, Rob and Bettina Walker, and me. Despite the work done that weekend Roy and Gary continue to produce lists of further work to be completed.

Peter Scott spent significant time on the mower and mowed the area in front of the house and the RC field. You could almost call the grass at the front of the house 'lawn'. The dams on the property are now full and after recent rains the grass has begun to grow. The place should be a picture in the coming months.

The working bees have mostly been supported by a small number of volunteers and even though they are willing workers it would be nice for other members of our society to help and see the asset that they have access that belongs to our society.

President NSWFFS

Terry Bond

TREASURERS REPORT NSWFFS
1st March 2020 to 30th April 2020

Opening Balances

C.B.A – A/C No 229300901281	\$22,180.89
C.B.A - A/C No 233610409062	\$150.25
Opening Total	\$22,331.14

C.B.A 1– Deposits	\$24,601.20
C.B.A 2– Deposits	\$1,056.00
C.B.A 1- Payments	\$31,010.19
C.B.A – Payments	\$00.00

Balance as of 31/1018 C.B.A 1	\$15,771.90
Balance as of 31/1018 C.B.A 2	\$1,206.25
Closing Total Balance C.B.A. 1 & 2	\$16,978.15

Scale Weekend followed by the State F1A, B, C, O/P & O/R at West Wyalong

We start with our Scale Weekend; the big day is on Saturday the 4th July. Flying will be on the Friday before and the Sunday after but the main competition is on the Saturday.

There will be a ½ hour Scramble Sunday morning followed by fun flying and a B-B-Q lunch; you bring your food we will supply the Barbie. This in the past has always been a great weekend as we have the New Zealanders with us, but sadly we are on our own this year. Entrants will be given a card and will judge the three models that they think are the best on the day this will include flying and static excluding their own

Following this we head for the AB field at West Wyalong where the field is looking so much better after the grading and the rain, it even has grass growing. Events that are being held are NSW & Vic State champs for F1A, B, C and the Southern Cross Cup these all count for team points for the world champs next year so competition will be fierce. There are also two events for open power and open rubber. Events run from 9th to the 14th July. On one of the nights we will light up the last big bonfire which is in the main field. Will the Mills boys be there to join in, they loved the fires last year?

Program and dates for NSW, VIC, & SCC Championships to be held at West Wyalong between the 9th and 15th of July

NSW State Champs

9th F1B & O/P

10th F1A, F1C & O/R

VIC State Champs
11th F1A & B
12th F1C

Southern Cross Cup
13th F1B & O/P
14th F1A, C & O/R
15th Fly offs and reserve day

Meeting July the 17th will see us back at our meeting place the Dundas sporting club, it seems a long time since we have sat down around a table for a formal meeting.

West Wyalong

I was very pleased with the work that we achieved at West Wyalong on the June long weekend. I didn't ask the masses as I was not sure what I could handle. The replacing of the louver windows was a straight forward job and was completed on the Friday. Judging by the back ones that were done some months back they will keep out a super amount of dust. The house was so much cleaner this time it was amazing. When the laundry has been made as dust free as possible, most of the dust problems should be solved.

Going back to the main task, and that was to take the tennis court fence down and re erect it. I was not sure how it would go. I had had some special invited volunteer's dropout but I must say those workers I had worked well. The fence came down and the fence went up. It just requires a bit if straightening here and there. This couldn't be done at the time as the concrete had to set. This work was finished on the Sunday which left the Monday to do all the other small jobs around the place. One job that was not so small was the cleaning of the kitchen cupboards, John Pennells was in charge here and along with Gail we can now see clean glasses etc in the cupboards, this was done along with the bulk of the dust in the house which has now been removed. Peter did a big tidy up of the garage as well as spending a lot of time on the mower. Also a new vent pipe was installed to the outside toilet; the old one had rusted away. As "Mr Grace said you all worked very well" thank you very much. Sunday night, there were 15 of us eating and enjoying the night around the huge fire just out from the back fence. Chris Bush treated us to a superb dinner all cooked in his camp ovens in the ground. Chris certainly knows his stuff in this department and looks after us in more ways than one.

FEES FEES FEES

As Terry has mentioned the yearly fees are due. MAAA has reduced them \$10 if they are paid by the 31st July. This makes our total fees just \$110. You can pay straight into our bank account NSWFFS BSB 062 293 A/C 00901281 on the field in cash or send a cheque. Please make sure you put your name as a reference.

Adrian Bryant (reprinted from BFFS newsletter)

Adrian's daughter Joanne has kept me informed of Adrian's battle with serious ailments. He has been in and out of hospital. His first visit to hospital revealed his benign liver tumour wasn't benign after all and that it may be cancer. He possibly had a blood clot in his leg. He's elected not to receive chemotherapy. While there they dismissed the blood clot and were starting to think liver cancer is doubtful as well. The tumour had only grown slightly. Joanne's next report said Adrian was doing better. She went on to say they want him to go into rehabilitation for 2 weeks to improve his walking. He is weak and very unsteady at present so she doesn't think that will help. She is looking forward to getting a rest while he is away. She also said that he does have liver cancer but they're not doing anything about it; just watch him and make his life the best it can be. Apparently Adrian is starting to get back to his normal self. The hospital only allows one visitor for one hour a day so family doesn't get to see him for that long. But he wants to go home. I'm sure we all join in wishing Adrian all the best with his battles.

Adrian is now out of hospital and resting at home (11/6/20)

Radial Engine

Now sitting in the Machinery shed is a large radial engine. It is waiting for ideas on where it should be displayed. We welcome your ideas and how this is to be done; we will even let you do it. Don't be shy it's not a job for me, more for someone with metal skills I would think.



Magazines WANTED can YOU help

We are looking for Australian magazines for our library, they are.
Any Model News Australian & New Zealand Modelling by Adrian Bryant
Australian Radio Control Model News
Issues No 1 through to Nos 121 & Nos 129 through to No 156
The Voice of Control Line Aeromodellers from around Australia
Nos 1 through to 141 & No 249 to current
Australian Radio Control Modeller
We only have Nos 1 to 4 from 1986
Any Australian Model Hobbies

Stop Press

We have had a split system Air Conditioner donated to us for the house. Hopefully by the time you read this it will have been installed in the lounge room. The existing one refused to work as it is probably 50 years old. It will be a great asset during the hot summer months.

Control Line Shelter

Negotiations are under way for this and it should be completed soon.

Around the Grounds Richmond Free flight club

Hi All,

I'd like to take this opportunity to thank Terry Bond (Club President) for requiring this column at such short notice and wish him well in his next, buttocks first and highly amusing, F1B rubber failure.

We have been a little short handed over the last two weeks, with competitions and West Wyalong rock collectors conventions and associated working B's. Notable absentees were Terry Bond (Our beloved President) and Roy Somersby.

Roy deserves some recognition as one who works behind the scenes making many of our projects possible, being our Enabler, Supplier and Dealer. Roy sell everything from anesthetic based diesel products to possible the best dope any of us have ever had (Both Nitrate and Butyrate!).

We had a little drama last week when Phil Warren disqualified himself from the next scale comp as his new model was so obscure that even Phil could not be certain it was modeled after a real aircraft.

Gary Pope had a superb flow of consciousness this week, with an outstandingly profound insight into the fine art of tuning an F1C aircraft. It came about during the engine run of said aircraft and unfortunately no one heard it.

Friday last showed us Bruce Hao's Latest aerodynamic modifications to his F1B entry, the net effect involved his model supplier being a step closer to affording his dream yacht and an unfortunate early D.T. for Bruce.

Gary Goodwin showed his versatility on the field by carefully trimming his F1B to perfect flight transition and glide phases. Further trimming transforming the craft, fit for any freestyle stunt event in the country. Gary has also been responsible for several new words gaining wide acceptance within the club.

Peter Jackson, supplier of our weekly dose of Jam-Dot biscuits, revealed his spiritual side on the paddock today, making offerings of 3 models to the irrigation Canal nicknamed "The Ganges". He was also seen attempting to absorb a blessing from the waters via his sneakers, socks and lower jeans.

I was the receiver of a very generous gesture from Peter Jackson 2 weeks ago, in the form of a free flight power craft suitable for my Redfin 030. I was able to pay homage to that gesture last Friday by using the fuselage to erect a monument in the out-field buried, at speed, some 3 inches into Tera-Ferma. In order to avoid tainting the monument, I removed my redfin engine from the scene complete with mount, found some 20M away. (FYI, Engine was fine).

Peter Norrie was seen flying his models called, "Intending to build", "On the back-burner", and "Not completed yet". I missed them myself, but they sound awesome. I think I will be buying the coffees for several week to come after this Pete!.

His honor, Sir John Corby attended the field last week accompanied by his Granddaughter. They were flying a well built and pretty model, built by his Granddaughter with his help, a claim strenuously refuted by his Granddaughter. After some trimming it flew well and was viewed as a total success. I'm sure the day was a great inspiration to John and great bonding experience for both of them.

Just goes to prove you CAN teach an old dog new tricks. Even John!

Ian Le Bronne loves his flying, this is proven by his affection for all types of flying models, Some Diesel fueled, some Glow fueled, some foam and some rubber. Other members of the club live in fear of him having a major mix-up resulting in an inferno that can't be put out.

Ian wanted me to let you all know he is offering cheap haircuts next week depending on which vehicle he arrives in. (Sorry for the in-joke but explanation will take forever).

Peter Scott flies large models, all of them free flight, and only some of them have transmitters. When asked why a free flight aircraft needs a transmitter he replies. "Sod Off". Pointing to one of his philosophy based T-shirts. Last week Peter showed us what one of his large models looked like when it was still in the box. The illustrated parts breakdown of the model was displayed after a VTOL landing behind his Van. The demonstration was applauded by all.

Although Terry Bond was not physically present at the field for the last 2 weeks, it wasn't to say that reminders of him were lacking. One such reminder left by his dog Lionel in the outfield alerted some of us to his lingering presence which we carried with us for the entire morning. Just letting you know Terry, it's things like that that make us think of you.

By
Steve Buckpitt

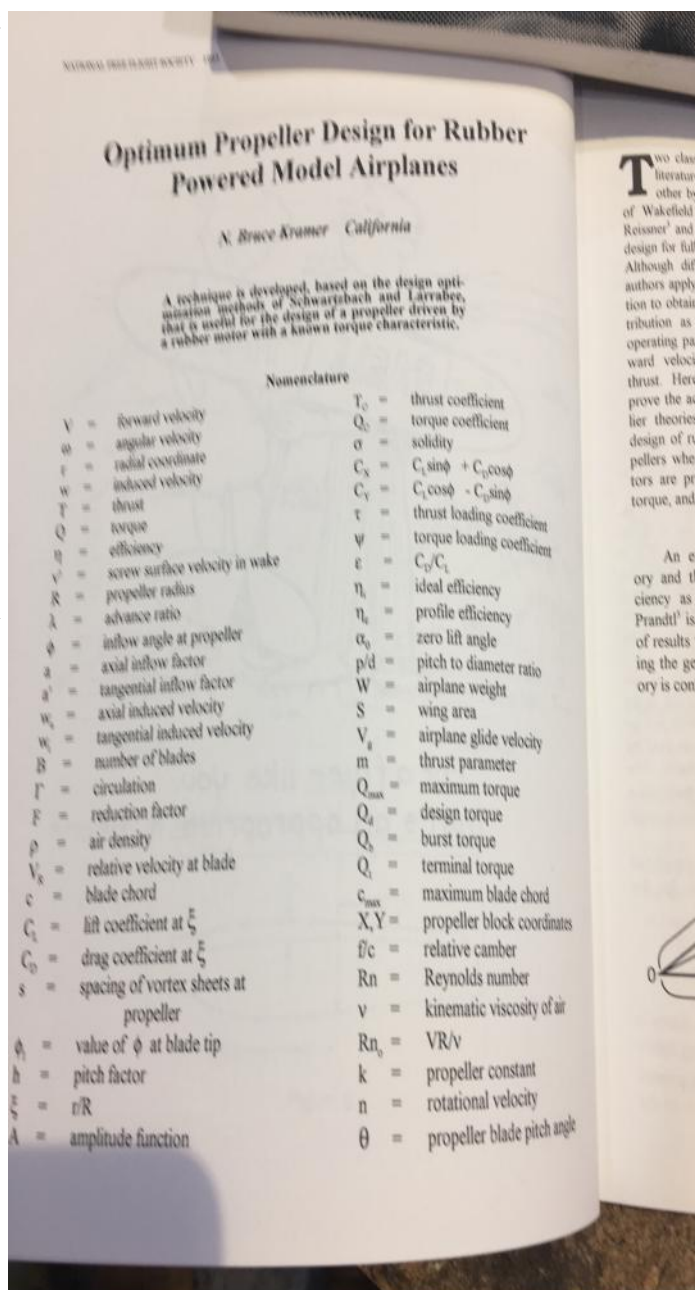
The Propeller Dilemma Terry Bond

During this wonderful time of compulsory isolation and too much 'Corona' virus I have been building some '60s coupes and a '54 Wakefield plus some indoor stuff as well. All needed handmade carved or moulded propellers. This is not my forte, so I decided to get some help from my flying buddies. Unfortunately, the old principle of 'all you gotta do' did not quite cut the mustard.

I have since found that the eastern seaboard of Australia is pretty much a waste land for expert advice, but I must thank those who offered it. It was given freely to help but I could not follow the directions. I felt despair and a sense of inadequacy. I started searching high and low for a better mousetrap but continued to turn large chunks of good quality balsa block into small shavings followed by dust which made me sneeze.

I continued to search and found a book printed in the UK which would obviously give me the answer so I sent for a copy. All a propeller is just an air screw pulling its way through the air. Still not convinced I searched through an American symposium and I think I found the answer. Photo 1 gives you some very useful terms to ensure you know what you are talking about and photo 2 gives you the method to work out what you need.

How simple is that?



$$C_y = C_L \cos \phi - C_D \sin \phi \quad (20)$$

$$\frac{d'}{1-d'} = \frac{\sigma'_{c_x}}{4 \sin \phi \cos \phi} \quad (21)$$

$$\frac{a}{1+a} = \frac{\sigma'_{c_y}}{4 \sin^2 \phi} \quad (22)$$

In these equations T_C and Q_C are thrust and torque coefficients defined by

$$T_C = \frac{T}{\rho \pi R^2 (\omega R)^2} \quad (23)$$

$$Q_C = \frac{Q}{\rho \pi R^3 (\omega R)^2} \quad (24)$$

and C_L and C_D are the blade element airfoil section lift and drag coefficients, and σ is called the solidity (the amount of blade chord that covers the circular arc).

First, the thrust coefficient for the lossless propeller of optimum design is derived from (16), (8), (9), and (18), giving

$$E5 \quad \frac{dT_C}{d\xi} = 2 \frac{v'}{V} \lambda^2 (1+a) \cos^2 \phi F \xi \quad (25)$$

so that

$$T = 2 \rho \pi R^2 (\omega R)^2 \left(\frac{v'}{V} \right)^2 \int_0^1 \frac{dT_C}{d\xi} d\xi \quad (26)$$

$$= 2 \rho \pi R^2 V^2 \left(\frac{v'}{V} \right)^2 \int_0^1 (1+a) \cos^2 \phi F \xi d\xi$$

Physically, this equation expresses the thrust as momentum transferred to the surrounding air mass. A slightly different but perhaps equally justified formulation used by Larabee is

$$T = 2 \rho \pi R^2 V^2 \int_0^1 (1+aF) \cos^2 \phi F \xi d\xi \quad (27)$$

Equation (27) simplifies the following calculations somewhat so it will be used. The differences in the values of the two integrals will be

small since a is small and $F \leq 1$. Defining the thrust loading coefficient as

$$\tau = \frac{T}{\frac{\rho}{2} \pi R^2 V^2} \quad (28)$$

and substituting (1) into (27) gives

$$\tau = 4 \int_0^1 \left[1 + \frac{1}{2} \left(\frac{v'}{V} \cos^2 \phi F \right) \right] \cdot \left(\frac{v'}{V} \cos^2 \phi F \right) \xi d\xi \quad (29)$$

substituting from (12) yields

$$\begin{aligned} \frac{\tau}{4} &= \left(A \frac{v'}{V} \right) \int_0^1 (\xi - 0.1)(1 - \xi)^{0.6} \xi d\xi + \\ &\quad \frac{1}{2} \left(A \frac{v'}{V} \right)^2 \int_0^1 (\xi - 0.1)^2 (1 - \xi)^{1.2} \xi d\xi \end{aligned} \quad (30)$$

The integrals can be easily evaluated using a programmable hand-held calculator

$$\frac{\tau}{4} = 0.10967 \left(A \frac{v'}{V} \right) + 0.01345 \left(A \frac{v'}{V} \right)^2 \quad (31)$$

which is a quadratic equation with solution

$$A \frac{v'}{V} = \sqrt{16.6215 + 18.5874 \tau} - 4.077 \quad (32)$$

which expresses the induced velocity parameter v'/V as a function of thrust coefficient τ and pitch parameter h .

Inflow Angle

Next, h must be determined. In doing this, losses will be included because losses significantly affect the result. Efficiency can be expressed as

$$\eta = \frac{T_e}{Q_e} \lambda \quad (33)$$

so, using Larabee's formula (27) and its counterpart for torque

$$\begin{aligned} \eta &= \lambda \frac{\int_0^1 \frac{dT_C}{d\xi} d\xi}{\int_0^1 \frac{dQ_C}{d\xi} d\xi} \\ &= \frac{\int_0^1 (1+aF) \cos^2 \phi F (1 - \epsilon \tan \phi) \xi d\xi}{\int_0^1 (1+aF) \cos^2 \phi F \frac{1}{k} \tan \phi \left(1 + \frac{\epsilon}{\tan \phi} \right) \xi d\xi} \end{aligned} \quad (34)$$

$$\text{where } \epsilon = \frac{C_D}{C_L}$$

Using (12) and (1), this becomes

(Note: This equation (35) is too large for placement here. It is found on the references page.)

ϵ is not likely to be constant, particularly since C_L and the Reynolds number in general will vary along the blade. However, over the outboard portion of the blade which provides most of the thrust, ϵ is constant may be a reasonable approximation. Figure 2 contains the radial thrust distribution calculated using (25) with

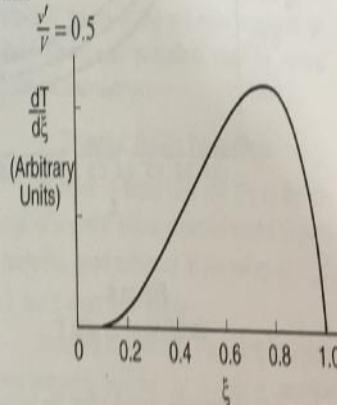


Figure 2.

It is seen that roughly 80 percent of the thrust is concentrated over the outboard half of the blade, peaking at approximately $\xi = 0.8$.

For $\epsilon = \text{constant}$, the various integrals are easily evaluated with a hand-held calculator to yield

$$\eta \left(1 + \frac{1}{2} \frac{v'}{V} \right) = \left(\frac{TR}{Q} \right) h = \frac{0.10967 - 0.18278h + \frac{1}{2} \frac{v'}{V} A (0.02691 - 0.04356h)}{0.10967 + 0.07375 \frac{1}{k} + \frac{1}{2} \frac{v'}{V} A (0.02691 + 0.01805 \frac{1}{k})} \quad (36)$$

Thus (36) in combination with (28) and (32) determines h in terms of the design parameters T , Q , R , V , and ϵ . An accurate approximate representation of (36) is

$$h = \frac{\left(\frac{Q}{TR} \right) - 0.672 \epsilon}{1 + 1.663 \left(\frac{Q}{TR} \right) \epsilon} \quad (37)$$

$$0.2 \leq h \leq 0.4$$

$$\epsilon \leq 0.05 \quad \text{and} \quad \tau \leq 0.6$$

The maximum error in this equation in terms of (Q/TR) is negligible (0.02%) over the range of parameter values given.

Efficiency

Using formula (37) for h in the efficiency formula (36) gives

$$\eta = \frac{1}{1 + \frac{1}{2} \frac{v'}{V}} \cdot \frac{1 - 0.672 \left(\frac{TR}{Q} \right) \epsilon}{1 + 1.663 \left(\frac{Q}{TR} \right) \epsilon}$$

An alternative expression is

$$\eta = \frac{1}{1 + \frac{1}{2} \frac{v'}{V}} \cdot \frac{1 - 1.663 \frac{h}{k}}{1 + 0.672 \frac{1}{k}}$$

These two expressions show that,

Shop News

We have some new stock at present.

Klotz oil

Ether

Methanol

P30 props along with a multitude of small rubber stuff

Large quantities of tissue

Mylar

For Sale

Kits

R/C, C/L, F/F

All proceeds go towards improvements at the AB Field West Wyalong

C/L Gieseke Nobler	E/B	Contents have been disturbed one shell split	
C/L Adams special	E/B	48" 1950 Unopened lazer cut stunter	
R/C Aeroflyte Brolga	E/B	2.0 Meter	Good
R/C Top Flite Kittiwake	\$80	47" On Floats	Good
R/C Playboy Senior	\$120	80" by Old Fashioned Hobbies	Good
R/C Playboy Senior	\$120	80" by Old Fashioned Hobbies	Good
R/C Lanzo Bonber	\$120	90" by Old Timer Aircraft	Good
R/C Lanzo Bonber	\$120	90" by Old Timer Aircraft	Good
R/C Lanzo Bonber	\$120	90" by Old Timer Aircraft	Good
C/L Peacemaker	E/B	35.5" by Old Timer Aircraft	Good
R/C Precedent Bi Fly	\$150	48" by Balsa craft England	Good
R/C Rolladen Schneider LS3	\$120	110" Foam wings Glass Fuse	Good
		2 fuselages one is T tail	
R/C Giles 202	\$150	1400mm ARF	Good
F/F Veron Cardinal	E/B	Good	
F/F/R Aeroflyte Raven	E/B	Good	
C/L Keil Kraft Ranger	E/B	Good	
2 Max Starick Hanger Rats	\$20 each	Good	
R/C Stiletto	\$50	by Dave Brown short kit	Good
R/C Hotdrop	\$50	by Dave Brown short kit	Good
R/C or F/F Lanzo Airborne	\$50	108" by Dave Brown short kit	Good
1936 Glider			

E/B indicates that I am or will Ebay these items soon

Contact Roy on 0413588720 for prices and more details



New windows.



Terry & John drilling new holes for the fence.

**Victorian State Championships for
F1A, F1B, F1C 2020
Also, Team Trials for the 2021 World Championships**

Information and Entry Form

Venue: NSW Free Flight Society Inc. field at West Wyalong
Program (all competitions):

NSW State Champs
9th F1B & Open Power
10th F1A, F1C & Open Rubber

VIC State Champs
11th F1B
12th F1A, F1C

Southern Cross Cup
13th F1B & Open Power
14th F1A, C & Open Rubber

Flyoffs will be in the evening or the following morning depending on conditions.

Anticipate changes. We have flown the NSW/Vic State Champs at West Wyalong over the last several years and on every occasion we have made substantial program changes to accommodate weather.

Entry:

Name:

Address:

Town:

State:

Phone No:

Email:

AUS Number:

Event(s) entered:

Entry fee: \$20 for any number of Vic events.

You can pay prior to the event by bank transfer or cheque, and you can also pay on arrival.

In any case please return the completed form (or at least the information by email)

Bank details: Name: Victorian Free Flight Society inc.

BSB: 033 028

A/C: 34 1764

If you make a bank transfer you need to let us know by writing DD here

We will be short of time keepers, please help.

NSW Free Flight Society Inc.
State Championships
Entry Form

West Wyalong, NSW
9th 10th July 2020

Categories F1A, F1B, F1C, Open Power, Open Rubber

Name_____Address_____

Town_____State_____

Phone No_____Email_____

AUS Number_____

Registration Fee	\$10 Please circle
F1A	\$10 Please circle
F1B	\$10 Please circle
F1C	\$10 Please circle
Open Power	\$10 Please circle
Open Rubber	\$10 Please circle
Total Amount Payable	\$20 / \$30 / \$40 / \$50 / \$60

Please circle and pay on arrival

We will be short of time keepers, please help if asked.



southern cross cup

11 - 13 april 2020



World Cup - Open International for F1A, F1B and F1C also Open Power and Open Rubber

Information

Entry Fees Registration Fee \$10.00
 Open Power & Open Rubber \$10.00 each
 World Cup events (F1A, F1B, F1C) pay \$30 once to enter any or all F1 classes
 There are no entry fees for Juniors

Send entries to: Roy Summersby, 132 The Esplanade, Umina Beach, NSW 2257 AUSTRALIA.
 Please make cheques or money orders payable to NSWFFS Inc in \$A.
 Prior entry AND payment by the **25th March 2020**. Late entry fee \$20.
 Overseas entrants may pay on the field.

F1A, F1B & F1C are World Cup Events. We need timekeepers for each pole, and we need your help.
 Please indicate if you can assist with timekeeping or CD'ing any event.

Enquiries: roydi132@optusnet.com.au

Name:FAI number:

Address:

Tel:E-mail:

Mobile No:

Timekeeping: Yes / No CD'ing Yes / No.....

Event	Fee	Amount
F1A	\$30	
F1B	\$30	
F1C	\$30	
Open Power	\$10	
Open Rubber	\$10	
REGISTRATION	\$10	\$10
	TOTAL	



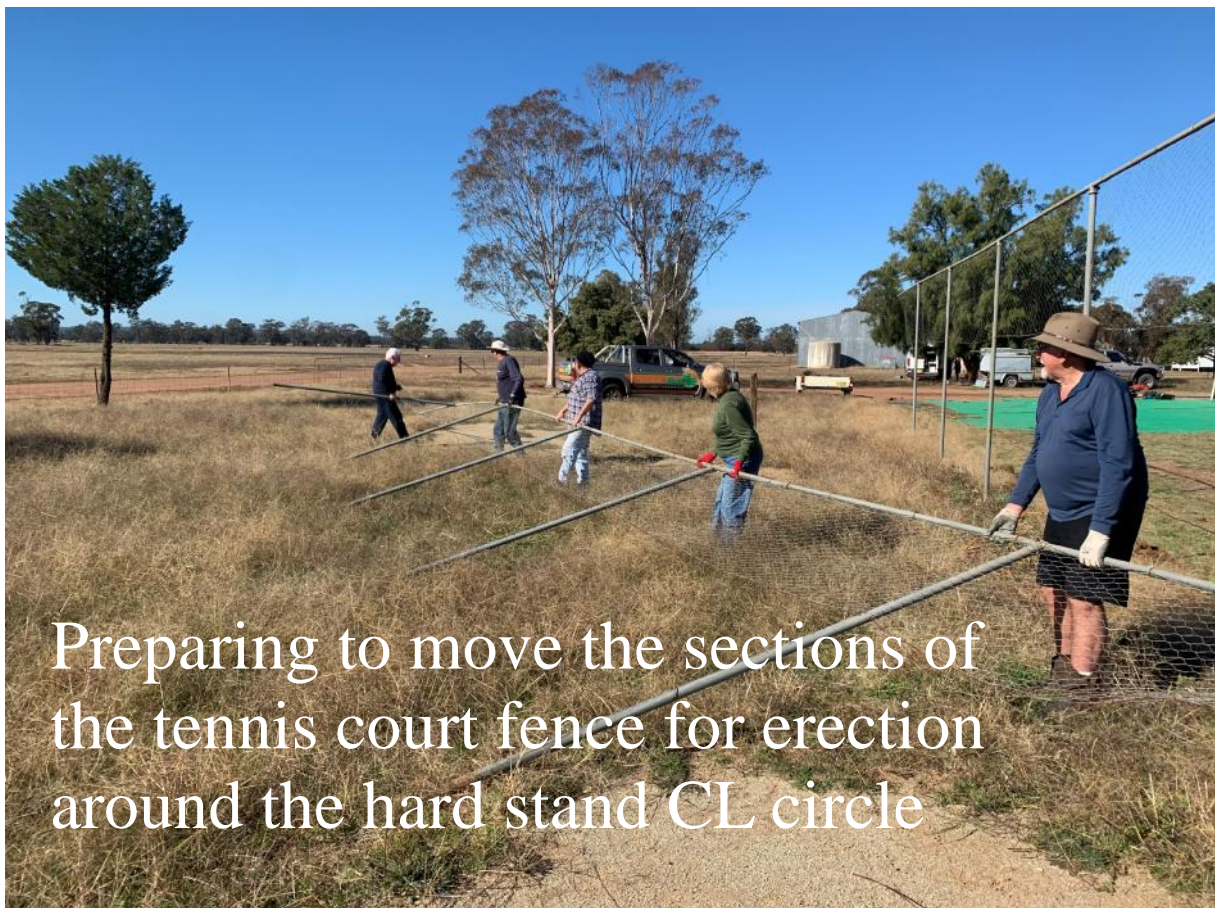
Fence being erected around C/L circle



Terry Bond filling in holes where the tennis fence posts were cut off.



The Workers



Preparing to move the sections of the tennis court fence for erection around the hard stand CL circle



Terry Bond and Garry Goodwin using the post hole digger. Being photographed by Vin Morgan



Warming ourselves with the bonfire after a very tasty camp oven meal.



Terry relaxing after a hard days work

NSWFFS Contest & Fixture Calendar 2020

July 3-4-5	Scale Rally Weekend. Scale comp Sat 4th, Sun 5th ½ Hour scramble, Fun Fly C/L flying & BBQ Lunch	Richmond Saturday BYO Food	7.00am till dark Trans Tasman	Phil Warren
July 17	General Meeting	Dundas Sport	7.30 pm	
Aug 2	State Champs F1G,H,J (Combined)	Richmond	7.00am- 1.00pm	Bruce Hao
Aug 16	Scale Rally, P 30, Combined Vintage	Richmond	7:00am – 1:00pm	R. Summersby
Aug 28-30	Cowra Oily Hand Weekend	Cowra		
Sep 13	½ Hour Scramble +Fun Fly B-B-Q Lunch	Richmond BYO Food	7:00am – 1:00pm	John Corby
Sep 18	Annual General Meeting	Dundas Sport	7:30 pm	
Sep 20	Combined % 5 flights	Richmond	7.00am - 1.00pm	Peter Scott
Oct 4	Combined % Multiple Entries	Hinton	7:00am – 1:00pm	Gary Goodwin
Oct 23-25	Wings Over West Wyalong All Dis- ciplines FUN FLY	W. Wyalong A.B.Field	7.00am-Till Dark	Plenty of Room for ALL
Nov 15	Bowden comp ROG details to come 1/2 Hour Scramble + Scale rally	Richmond	7:00am – 1:00pm	Peter Jackson
Nov 20	General meeting	Dundas Sport	7.30	
Nov 27	Friday Xmas Party	Richmond	7.00am – 1.00pm	Terry & Lyn
Dec 6	½ Hour Scramble, Combined Vin- tage with SAMS & Fun Fly.	Richmond BBQ Xmas	7:00am – 1:00pm Lunch BYO	Terry Bond FOOD

Notes All scrambles start at 8.00am